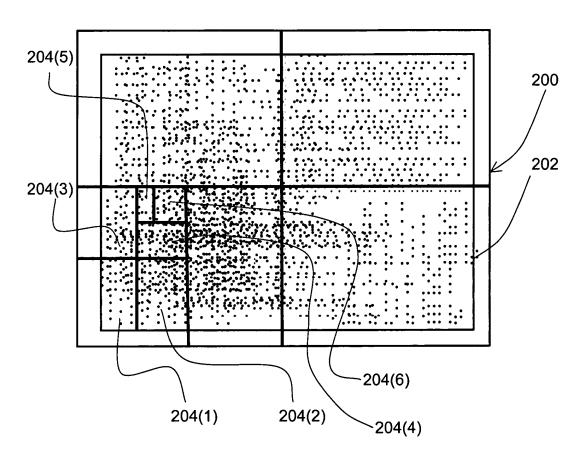
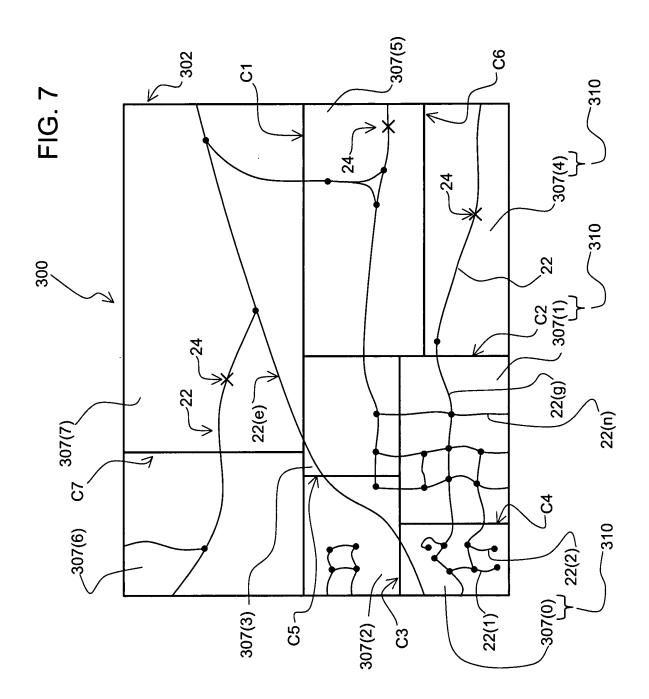


FIG. 6





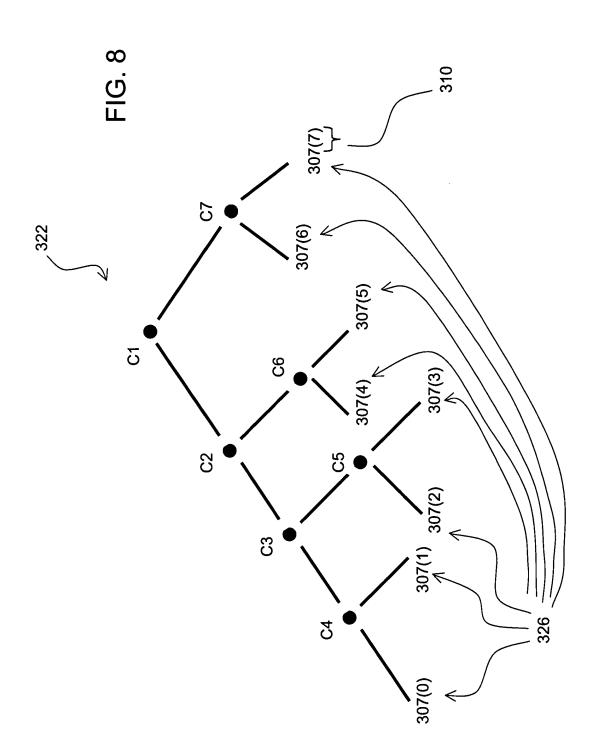


FIG. 9

Internal KD-Tree Entry

5 4 Right Offset Index ō 2 Byte 1 _ Left Offset 0 0 Index ō 0 & 0 0 0 4 5 Control Bits Byte 0 3 0 0 00

Control Bit Definitions:

0 = Vertical Cut; 1 = Horizontal Cut

0 = Left is Offset; 1 = Left is Index

Bit 1:

Bit 0:

Bit 2:

0 = Right is Offset; 1 = Right is Index

Bits 3-7: Location of Cut

Offset/Index Bit Definitions:

Bits 8-11: Left Offset or Index

Bits 12-15: Right Offset or Index

An Offset is the distance from the beginning of the current entry, in 2-byte units, to the beginning of its left or right child entry.

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An Index is in the range 0-7, and is the index assigned to the rectangle represented by the left or right child of the current entry.



| | SUB-RECTANGLE INDEX | | | | | | | |
|--------|---------------------|-----|-----|-----|-----|-----|-----|-----|
| SEGS | (0) | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| seg(1) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| seg(2) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | |
| | | | | | | | | |
| seg(e) | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| seg(g) | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| | | | | | | | | |
| seg(n) | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

FIG. 10

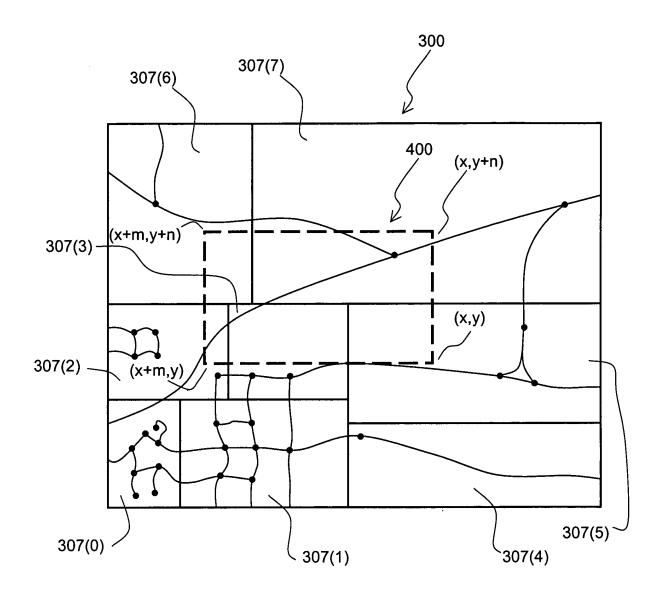


FIG. 11

FIG. 12

